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EXAMINER

PELLEGRINO, BRIAN E

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/17/07 has been entered.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischell et al. (5634928) in view of DeMello et al. (5429597). Fischell et al. discloses (Fig. 1) a stent delivery catheter with a guide wire **30** within an inner tube **11** with its lumen extending from the proximal to the distal end and a region for a stent. It can be seen the tip has a tapered end **11B** and has a radiopaque marker **17** attached to the inner tubular member. The system also includes an outer tubular member or sheath **20** that overlies the stent. Fischell also discloses means to move the outer member, col. 5, lines 26-29. However, Fischell et al. fail to disclose the *tip component being attached* or having the radiopaque material compounded with it. DeMello et al. teach that tips for catheters can

be made of polymeric material, such as a poly-ether-block amide compounded with a radiopaque substance, col. 5, lines 6-21. DeMello et al. show (Fig. 2) the tip **35** *attached* to the catheter system and is tapered for good flexibility, col. 6, lines 58-60. It would have been obvious to one of ordinary skill in the art to use a radiopaque substance in a polymer attachable tip as taught by DeMello et al. with the catheter system of Fischell et al. in order to provide a non-movable radiopaque material and provide the ability to use different length tips by using attachable tips.

Claims 17,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischell et al. '928 in view of Klemm (5458615) and DeMello et al. '597. Fischell et al. and DeMello et al. are explained above. However, Fischell et al. fails to disclose an attached tip with a polymeric material compounded with it and explicitly the housing or pull-back assembly used to retract the sheath. Klemm teaches (Fig. 12) a housing assembly **51** with a base and a slidable handle **53** thereon. DeMello et al. is explained supra. It would have been obvious to one of ordinary skill in the art to incorporate a pull-back handle assembly as taught by Klemm and an attachable radiopaque tip as taught by DeMello et al. with the catheter system of Fischell et al. such that it gives the surgeon easier manipulation capability and a non-movable tip that is easy to locate since it is radiopaque.

Claims 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al. (5391172) in view of Maria van Erp (6102891). Williams et al. disclose (Fig. 5) a delivery catheter with an inner tubular member having an inner guide wire lumen for guidewire **145**. Williams also shows the inner member has a region for

mounting a stent **40** and an outer restraining sheath **10**. Fig. 3 shows a handle with a pull-back portion **100** mounted on a base. Williams discloses the handle retracts the sheath, col. 3, lines 14-24. However, Williams et al. fail to disclose the distal mounting region including an opening for fluid flow. Maria van Erp teaches (Figs. 2-4) a plurality of openings **13** formed along the length of the inner tubular member **12** that can allow fluid flow through the openings. Maria van Erp also teaches that the holes are important to allow air or fluid to be removed from the catheter, col. 3, lines 57-63. It would have been obvious to one of ordinary skill in the art to incorporate openings in the distal mounting region to allow fluid flow as taught by Maria van Erp in the catheter of Williams et al. such that no fluid or air can be introduced harmfully to the patient by using the holes to evacuate the lumen.

Claims 18,24,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischell et al. '928 in view of Klemm (5458615) and DeMello et al. '597 and further in view of Maria van Erp '891. Fischell as modified by Klemm and DeMello is explained supra. However, Fischell in view of DeMello fail to disclose the catheter system including means or a syringe to evacuate air from the catheter. Maria van Erp is also explained above. It would have been obvious to one of ordinary skill in the art to utilize air evacuation means as taught by Maria van Erp in the catheter system of Fischell et al. as modified by Klemm and DeMello in order to prevent any air embolis from forming in the bloodstream that resulted from lack of removal from the catheter.

Claims 20,26,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischell et al. '928 in view of Klemm et al. '615 and DeMello et al. '597 and further in

view of Houser (5876369). Fischell as modified by Klemm and DeMello is explained supra. However, Fischell in view of Klemm and DeMello do not disclose the use of BaSO<sub>4</sub> in the PEBAX material of the catheter tip. Houser teaches that BaSO<sub>4</sub> is incorporated into polymers to provide radiopacity for enhancing fluoroscopic observations when using the system, col. 6, lines 11-19. It would have been obvious to one of ordinary skill in the art to incorporate the specific radiopaque material BaSO<sub>4</sub> in a polymer as taught by Houser using the catheter system of Fischell et al. as modified by Klemm and DeMello such that the tip has enhanced visibility for insertion purposes.

#### ***Allowable Subject Matter***

Claims 21,22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed 12/17/07 have been fully considered but they are not persuasive. Applicant argued that the patent to Klemm '615 failed to disclose the limitation of the lumen extending the length of the inner member. However, it appears the Applicant has not addressed the rejections of record, since the Examiner did not use Klemm to reject the claims for this limitation, Klemm was only used for the claimed limitation of the housing assembly to control delivery of the stent. The Examiner used the reference to Fischell '928 for claims 17 and 28 which teaches the claimed limitation

of the lumen extending from proximal to distal end of the inner tubular member. The Examiner used Williams '172 for claim 29, not requiring this limitation. Applicant failed to submit any arguments in the amendment dated 12/17/07 pointing out disagreements with the examiner's contentions and provided no discussion of these references applied against the claims, explaining how the claims avoid the references or distinguish from them. Thus, the rejections are maintained.

### ***Conclusion***

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3738

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Pellegrino whose telephone number is 571-272-4756. The examiner can normally be reached on M- F (7:30-4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TC 3700  
/Brian E Pellegrino/  
Primary Examiner, Art Unit 3738